Amergent Techs, LLC

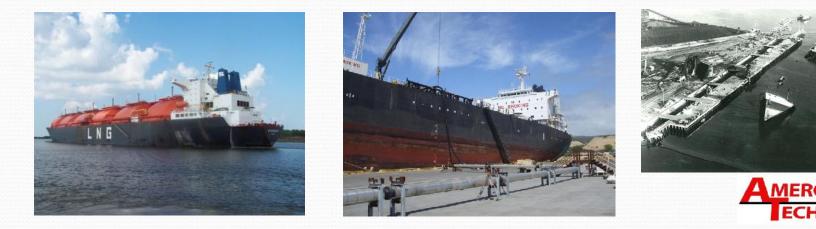
Putting People on Target





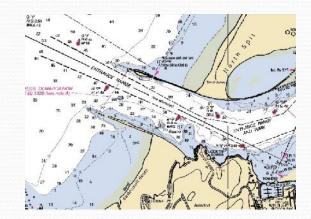
Services

- Project management
- Focused on safety, security and environmental services
- Emergency response
- Regulatory Compliance and Training
- Special projects
- Assist clients finding solutions for their problems



Navigation and Waterway Services

- Feasibility Assessments
- Vessel Traffic Systems
- Simulator modeling
- Waterway Safety Analysis
- Channels, Rivers, Bays & Coastal
- Breaking Bar Studies
- Water depth and breadth
- Channel configuration
- Harbor Aids to Navigation
- US Coast Guard WAMS Studies









Port and Waterway Projects

- Conducted the waterway safety/security assessments for seven LNG projects in the US
- Managed the safety/security planning and installation of two new marine terminals in Hawaii
- Organized federal, state and local agencies (over 20 agencies) in emergency response to an LNG accident
- Conduct waterway assessment for LNG movement in Alaska, Canada, and US
- Managed safety/security planning for very large oil terminal on the west coast of the US







M/V Santa Clara Chemical Release



January 3, 1992 Arsenic Trioxide-at sea

Magnesium phosphideon deck and dock

- Tied up berth for weeks
- Significant chemical cleanup
- Negative public response
- Intentional release of hazardous material



M/V Santa Clara Main Deck





M/V Santa Clara Container





Fairfax, Virginia



Mantua Neighborhood Fairfax, VA 1992



Years of Oil into Water Table



- Explosive levels found in basements
- Dug trenches in backyards
- Installed wells to remove oil
- 5 years recovered over 36,000 gals of oil from wells





LNG Terminals



Comments also ask that the possible negative effects of hydraulic "fracking" be evaluated, stating that a pipeline would likely increase the practice of drilling deep beneath the ground for natural gas. "To put it another way, the explosive force on one LNG tanker is equal, roughly, to 55 Hiroshima bombs!"





Mega Borg, Galveston, Texas



8 June 1990

- GOM Lightering
- 100,000 bbls of oil on board
- Dispersant used



Mega Borg burns for 7 days







4.2 million gallon spill60 miles offshorePlanned for the worst



Advanced Planning

- Planned for vessel sinking
- Planned for grounding the vessel to avoid sinking
- Boomed the Texas/Louisiana coast
- Prepared dispersant application & approval
- Used bio remediation testing
- Removed debris from beaches in advance with volunteers



Risk Management Planning









New rules keep large outgoing ships away from Bay Bridge during fog



Who is Responding?

Governor complains about oil spill spotlight on Louisiana

Many people in San Francisco took one look at the oily mess and said, "Hey, that's more than 140 gallons!" Senators complain White House

Mayor criticized the Coast Guard for its response, as its initial reported figures, between 100 to 400 gal of oil, were significantly lower than those of the actual spill.

blocking hurricane health care Administration officials wrote that COSCO's use of a terminal to be built on former Naval property would not adversely affect national security.

> Some in Congress raised national security concerns about this proposed lease.



Management Focus & Participation

- Personality dependent
- Politics
- Knowledge of subject
- Use of the media
- Familiarity with Emergency and Crisis Management



Lessons Learned

Advanced Planning

- Be aggressive
- Be fast and get on top of it early. Don't let it "ramp up"
- Mobilize key personnel and get additional expert help
- Port risk assessment needs to be carefully reviewed
- Practice and document how we actually respond
- Participate in drills and exercises at the right levels
- Be prepared with Fact Sheets and don't let others search for information



Thank You

Any Questions?



